



## An analysis of academic anxiety, educational aspiration and school climate of Gen-Z learners amidst Covid-19 pandemic

Mohd Shakir<sup>1</sup>, Anam Tahir Hashmi<sup>2</sup>

<sup>1</sup> Assistant Professor, Department of Education, Aligarh Muslim University, Aligarh, Uttar Pradesh, India

<sup>2</sup> Research Scholar, Department of Education, Aligarh Muslim University, Aligarh, Uttar Pradesh, India

### Abstract

The objective of the present research was to study the academic anxiety, educational aspiration, and school climate of Gen-Z learners amidst Covid-19 pandemic. A sample of 504 students studying in different secondary schools of District Lucknow was selected through Simple random sampling technique. Data were analysed by using different statistical techniques such as, Independent Samples T-Test, Correlation and Regression Analysis. Results of the study revealed a considerable difference in the academic anxieties of male and female Gen-Z learners. Female Gen-Z learners exhibited higher level of academic anxiety as compared to male Gen-Z learners. Additionally, no considerable difference was noted with respect to level of educational aspiration and school climate of male and female Gen-Z learners. The correlation analysis showed a significant and negative relationship between the criterion variable (academic anxiety) and predictive variables (educational aspiration and school climate). Furthermore, the results of regression analysis revealed educational aspiration to be the significant and negative contributor of academic anxiety of Gen-Z learners followed by school climate whose contribution was also negative and low, yet of significance.

**Keywords:** Academic anxiety, school climate, educational aspiration, Covid-19, and Gen-Z learners

### Introduction

Withstanding the impact of Covid-19 pandemic people across the globe are gradually returning to their pre-pandemic lifestyle. Undeniably, the times of Covid-19 have been responsible for acute physical and psychological health crisis of people (Vinkers *et al.*, 2020, Chhetri *et al.*, 2021) [8,32]. The profound impact of Covid-19 had adversely affected the mental health of people from all walks of life (Son *et al.*, 2020) [30] especially students (Okunlola *et al.*, 2020) [23]. Rehman *et al.* (2020) [25] mention that among various professions students and healthcare professionals experienced stress and anxiety more than others. During the upsurge of Covid-19 pandemic approximately 1.5 million schools in India were closed (Agoramoorthy, 2021) [1] to limit the spread of virus. Consequently, the academic community witnessed an unplanned transition from traditional to online mode of learning for continuing educational services (Hidalgo-Andrade *et al.*, 2021) [13]. This rapid transition of changed mode of learning (Chitra *et al.*, 2020) [9], the uncertainty of academic year (Kecojevic *et al.*, 2020) [17] and the unstable situation surrounding pandemic became a source of stress and anxiety for students (Ang. *et al.*, 2022; Brahma and Barman, 2022) [5].

The Generation-Z (Gen-Z) which refers to the generation of individuals born between mid1990's to early 2010's, (Benitez-Marquez *et al.*, 2022) [7] exhibit higher rates of depression and anxiety as compared to individuals born in previous generations even before the occurrence of Covid-19 pandemic (Schroth, 2019) [26]. The exact dates may vary as per the authors; however, the year range 1995-2010 is commonly associated to Generation-Z (Benitez-Marquez *et al.*, 2022; Ang. *et al.*, 2022) [5, 7]. Akbar *et al.*, (2024) [2] also mentioned that Generation-Z experience more mental health issues as compared to millennial. The mental health of Gen-

Z learners has profoundly been affected during pandemic (Harari and Bareket-Bojmel, 2022) [11].

One of the mental health issues often experienced by students is anxiety, particularly academic anxiety (Mahajan, 2015) [21]. Pal *et al.*, (2022) [24] in their study found academic anxiety to be one of the most prevalent mental health disorders experienced by learners. According to American Psychiatric Association (2013) "anxiety disorders include disorders that share features of excessive fear and anxiety and related behavioral disturbances". Academic anxiety may be defined as a state of intense fear and uneasiness experienced by learners when they are unable to manage academic pressures. Siakalli *et al.*, (2022) [28] in their study mentioned an increase in anxiety of secondary school students amid Covid-19 pandemic. Academic anxiety has often been associated with various social and psychological factors such as home environment, school environment motivation, efficacy, resilience etc.

The present research is an endeavor to study the academic anxiety of Gen-Z learners in relation to their educational aspiration and perceived school climate amidst Covid-19 pandemic. Data for the present research were collected during the reopening of schools after removal of lockdown and easing restrictions, while following the necessary precautionary measures. The research would provide an insight into the academic anxiety, educational aspiration and school climate of Gen-Z learners after reopening of schools amid Covid-19 scenario.

### Objectives of the study

1. To study the difference in the mean scores of academic anxiety of Gen-Z learners on the basis of gender.
2. To study the difference in the mean scores of educational aspiration of Gen-Z learners on the basis of gender.

- To study the difference in the mean scores of school climate of Gen-Z learners on the basis of gender.
- To study the correlation between criterion variable (academic anxiety) predictive variables (educational aspiration and school climate).
- To study the combined and individual contribution of educational aspiration and school climate in predicting the academic anxiety of Gen-Z learners.

**Hypotheses**

- H<sub>01</sub> There is no significant difference in the mean scores of academic anxiety of male and female Gen-Z learners.  
 H<sub>02</sub> There is no significant difference in the mean scores of educational aspiration of male and female Gen-Z learners.  
 H<sub>03</sub> There is no significant difference in the mean scores of school climate of male and female Gen-Z learners.  
 H<sub>04</sub> There is no significant correlation between criterion variable (academic anxiety) predictive variables (educational aspiration and school climate academic).  
 H<sub>05</sub> There is no significant combined and individual contribution of educational aspiration and school climate in predicting the academic anxiety of Gen-Z learners.

**Variables of the Study**

- Criterion variable:** Academic Anxiety
- Predictive variables:** Educational Aspiration and School Climate

**Sample:** Using Simple random sampling technique, a sample of 504 secondary school’s students of District Lucknow of Uttar Pradesh, India was selected.

**Research Tools:** For the present study the research tools employed for collecting data are as follows:

- Academic Anxiety Scale developed by Siddiqui and Rehman (2017).
- Level of Educational Aspiration Test (LEAT) by Khan (2011).
- School Climate Scale by Singh & Imam (2015).

**Statistical techniques used:** Statistical techniques such as t-Test, Correlation and Regression analysis were used for analysing data.

**Data Analysis and Interpretation of Results**

The objectives 1, 2 and 3 were analysed with the help of t-Test and the results have been shared in Table 1, 2 and 3 respectively.

**Table 1:** N, M, SD, and t-value of academic anxiety of male and female Gen-Z learners

Groups	N	M	SD	t-value	d	Remark
Male learners	259	72.90	11.238	3.86	0.34	p<0.01 Significant
Female learners	245	77.04	12.815			

It is evident from Table 1 that the t-value 3.86 which is significant at 0.01 level with df = 502, indicating a significant difference in the mean scores of academic anxiety of Gen-Z learners based on their gender. Thus, H<sub>01</sub> that “There is no significant difference in the mean scores of academic anxiety of male and female Gen-Z learners”, stands rejected. Additionally, female learners mean score of academic anxiety (77.04) is higher than that of male learners (72.90) which shows higher level of academic anxiety in

female learners. Furthermore, the value of effect size (d= 0.34) reflects a small effect size. Thus, gender was found to have a small effect on academic anxiety.

**Table 2:** N, M, SD, and t-value of educational aspiration of male and female Gen-Z learners

Groups	N	M	SD	t-value	Remark
Male learners	259	21.54	3.540	1.83	Not significant
Female learners	245	20.96	3.605		

As apparent from Table 2 the t-value is 1.83 which is not significant. This indicates that mean scores of educational aspiration of male and female learners does not differ significantly. Therefore, H<sub>02</sub> “There is no significant difference in the mean scores of educational aspiration of male and female Gen-Z learners” is not rejected. Hence, it is found that male and female Gen-z learners have educational aspiration of similar level.

**Table 3:** Gender-wise N, M, SD and t-value of school climate of Gen-Z learners

Groups	N	M	SD	t-value	Remark
Male learners	259	67.70	11.450	0.69	Not significant
Female learners	245	67.00	11.229		

Table 3 reveals that the t-value is 0.69 which is not significant indicating no substantial difference in school climate of learners based on their gender. Therefore, the H<sub>03</sub> that “There is no significant difference in the mean scores of school climate of male and female Gen-Z learners” is not rejected. It may be said that male and female learners have similar experience of their school climate.

**Correlation coefficients between criterion variable (Academic anxiety) and predictive variables (Educational aspiration and School climate)**

The fourth objective was to study the correlation between criterion variable (Academic anxiety) and predictive variables (School climate and educational aspiration). Table 4 represents the results of the correlation analysis:

**Table 4:** Correlation coefficient between criterion variable (Academic anxiety) and predictive variables (Educational aspiration and School climate)

Predictive Variables	Criterion Variable
	Academic Anxiety
Educational Aspiration	-.459**
School Climate	-.203**

\*\*Correlation is significant at 0.01 level

As mentioned in Table 4 the correlation coefficients between predictive variables which are educational aspiration and school climate and criterion variable i.e. academic anxiety are -.459 and -.203 respectively which are negative and significant at 0.01 level with df = 502. It reflects that academic anxiety is negatively and significantly correlated with educational aspiration and school climate of Gen-Z learners. Consequently, the H<sub>04</sub> that “There is no significant correlation between criterion variable (academic anxiety) and predictive variables (educational aspiration and school climate)” is rejected. Further, the negative correlation denotes an inverse relationship between criterion and predictive variables which mean that higher the score of educational aspiration and school climate lower will be the academic anxiety and vice versa.

**Regression analysis between predictive variables (Educational aspiration and School Climate) and Criterion Variable (Academic Anxiety)**

As per the fifth objective the individual and combined contributions of educational aspiration and school climate in predicting the academic anxiety of Gen-Z learners was studied by performing Regression analysis and the results have been mentioned in Tables 5.1, 5.2 and 5.3.

**Table 5.1:** Model summary of Stepwise Regression Analysis between Predictive Variables and Criterion Variables

Model	R	R <sup>2</sup>	R <sup>2</sup> Change	Std. Error	F Change
1	.459 <sup>a</sup>	.211	.211	10.846	134.021**
2	.484 <sup>b</sup>	.234	.023	10.695	15.235**

\*\*Significant at 0.01 level

a. Predictors: (Constant), Educational aspiration

b. Predictors: (Constant), Educational aspiration, School Climate

From Table 5.1 it can be said that educational aspiration as well as school climate are significant predictors of academic anxiety of Gen-Z learners. The extent of prediction is determined to be 23.4% variance, as expressed by the multiple regression factor R<sup>2</sup> of the two predictive variables to the criterion variable. Additionally, educational aspiration was found to be the most significant contributing variable in influencing the academic anxiety of learners as the contribution of educational aspiration is 21% followed by contribution of school climate which shares 2.3% variance in criterion variable, both of which are significant at 0.01 level (F-change= 134.021 and 15.235).

**Table 5.2:** Summary of ANOVA for Regression Analysis

Source of Variation	Sum of Squares	df	Mean square	F	Sig.
Regression	17507.765	2	8753.882	76.528**	.000 <sup>c</sup>
Residual	57308.394	501	114.388		
Total	74816.159	502			

\*\* Significant at 0.01 level

c. Predictors: (Constant), Educational aspiration and School Climate

The 5.2 ANOVA table depicts that the (F=76.528 p<0.01) is significant at 0.01 level which implies that the regression model is quite satisfactory and good fit for the data. Therefore, it can be concluded that educational aspiration as well as school climate have a significant individual and combined contribution in predicting the academic anxiety of gen-z learners.

**Table 5.3:** Coefficient of Regression Analysis

Predictive Variables	Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
	B	Std. Error	B		
Constant	118.037	3.828		30.833	.000
Educational aspiration	-1.50	.134	-.442	77.229**	.000
School Climate	-.165	.042	-.154	-3.903**	.000

\*\*Significant at 0.01 level

Criterion Variable: Academic Anxiety

As apparent from Table 5.3 the Standardized Beta Coefficients for educational aspiration and school climate are -.442 and -.154 respectively which are negative and significant at 0.01 level. It indicates that educational

aspiration and school climate negatively contribute in predicting the academic anxiety of Gen-Z learners. More specifically, an increase in level of predictive variables (educational aspiration and school climate) will reduce the level of criterion variable i.e. academic anxiety of learners. The regression equation to predict the academic anxiety of Gen-Z learners may be derived from Table 5.3

$$Y = -X_1 + X_2 + C$$

$$Y = (-1.50X_1) + (-.165X_2) + 118.307$$

Where, Y= Predicted Variable (Academic Anxiety Score)

X<sub>1</sub> = Score of Educational aspiration

X<sub>2</sub> = Score of School Climate

C = Constant

The findings of regression analysis from Tables 5.1, 5.2 and 5.3 reveals that educational aspiration and school climate are negative and significant contributors of academic anxiety of Gen-Z learners. Consequently, the H<sub>05</sub> that “There is no significant combined and individual contribution of educational aspiration and school climate in predicting the academic anxiety of Gen-Z learners” is rejected.

**Discussion**

The present study found that female Gen-Z learners were more academically anxious as compared to male Gen-Z learners. The finding aligns with the findings of other studies such as Siddiqui and Rehman (2014) [29]; AlAteeq *et al* (2020); Kecojevic 2020; Verma (2020) [17]; Prouse *et al*. 2021. A few probable causes behind higher level of academic anxiety of female Gen-Z learners may be increased domestic workload amid pandemic, fear of dropping out from school due to financial crisis especially in economically disadvantaged families, as it is observed that some Indian families prioritize the education of male child over female child, techno-anxiety, inaccessibility to e-learning resources etc.

The study also revealed no substantial difference in educational aspiration of male and female learners. The finding is in consonance with the findings reported by other researchers like Bora (2016); Chawla (2018) [16]; Prajapati and Desai (2019); Debnath & Singh (2020) [10] and Krishan, Nath & Kumar (2024) [19]. Additionally, no significant difference was found in the perception of school climate of male and female Gen-z learners. Similar finding was reported by studies like Lawrence & Vimala (2012); Mathialahan & Govindarajan (2019), Hashmi and Shakir (2023) [12]. The concept of school climate is a broad in nature it includes physical infrastructure, pedagogical style, teacher-pupil interactions, disciplined behaviors, meaningful interaction among learners social and emotional environment etc. During Covid-19 pandemic when students and teachers were engaged in online teaching-learning activities the essence of true school climate would have been a missing factor. Remote learning might have not been able to provide experience of proper school environment to learners therefore; the present research did not find considerable difference in the perception of school climate of Gen-Z learners.

A significant and negative relationship between academic anxiety and educational aspiration of Gen-Z learners is another finding of this study. The finding aligns with the findings of Azeem (2018) [6]; Jabeen & Andrabi (2018) [15]; Khesht-Masjedi *et.al*. (2019) [18]; Narayanaswamy (2019) [22]. A significant and negative correlation was also found

between academic anxiety and perception of school climate of Gen-z learners. Studies like Liu (2012)<sup>[20]</sup> and Thakur and Kumar (2014)<sup>[31]</sup> also reported similar finding.

Another finding of this study revealed that educational aspiration contributes significantly and negatively to the academic anxiety of Gen-Z learners with school climate having extremely low yet significant contribution. It may be said that by working towards providing healthy school climate, necessary and timely guidance, emotional support and counseling services would help in improving the educational aspiration of learners and thereby effectively managing their level of academic anxiety.

#### Major findings of the present study

1. Compared to male Gen-Z learners Female Gen-Z learners reported higher level of academic anxiety
2. Male and female Gen-Z learners were found to have educational aspiration of same extent.
3. Gen-z learners, both male and female Gen-Z learners had similar perception of their school climate
4. Educational aspirations as well as school climate were found to have significant and negative correlations with academic anxiety of Gen-Z learners.
5. Educational aspiration and school climate were found to have significant individual and combined contributions in predicting the academic anxiety of Gen-Z learners.

#### Implications of the study

Despite the fact, that the scope of the present research was limited to a sample of 504 secondary school students studying in District Lucknow, the researcher would respectfully suggest the following implications:

1. Academic anxiety is a commonly occurring emotion experienced by most of the students. Learners in school often face academic challenges, which cause academic anxiety in them. Efforts must be made to develop resilience particularly academic resilience among students so that they may effectively manage their academic anxiety.
2. Professional assistance at each stage of school must be provided to the learners experiencing disproportionate levels of academic anxiety that hinders the personal and professional development of the learners.
3. Learners must refrain from harmful temptations such as gaming addictions, consumption of intoxicants etc. for stress management, rather they must focus on developing healthy habits and practicing relaxation techniques such as meditation, yoga and positive self-talk.
4. Learners must try to avoid perfectionist trap and focus on self-improvement and giving their best. Additionally, habits of procrastination and last-minute preparation must also be avoided.
5. Parents must not hold unrealistic expectations from their children in this time of stiff competition. Rather parents must try to know the interest and capabilities of their child, believe in them and guide their children accordingly,
6. Teachers must create congenial classroom environment, where learners could feel free to discuss their academic related problems and can have meaningful interactions with the other students.

7. Learners must be provided with proper training with respect to virtual learning experiences to manage their techno-anxiety, prepare them for innovative pedagogical structure, and create stress free and student friendly virtual learning environment.
8. Counseling of parents must also be prioritized and should be done on regular basis.

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